OB-PEDI SEMINAR
ANTEPARTUM
PREMPTIVE
- Periods
- N & V
- Fatigue
- Urination
- Breast changes
- Quickening
- Pigmentation

PROBABLE
+ PG test
- Enlarged ABD
- Hegar's sign
- Softening of uterus
- Chadwick's sign
- Bluish vagina
- Goodell's sign
- Softening of cervical lip
- Ballottement - fetus rebounds
- Palpable fetal outline
- Braxton-Hicks contractions

POSITIVE
- FHT
- Fetal movement
- Fetal skeleton on X-ray
- Fetal sonography

PRENATAL CARE

PELVIC EXAM
- Pap smear
- Pelvimetry

LAB TESTS
- CBC
- UA
- YDRL
- RUBELLA
  IF negative titer (1:10)
  IF positive RH factor
  IF positive RH factor
  IF negative titer (1:10)

PREGNANCY TESTS
- RIA+ 6 days before missed period
- Latex agglutination test
- Hemagglutination inhibition test
- EDC
- Naegle's rule (LMP - 3 months) + 7 days

ASSESSMENT

INITIAL VISIT
- History & Physical
- OBSTETRIC HISTORY
- PARA
- GRAVIDA

SCHEDULE PREGNANT VISITS
- Vitals
- UA
- WT
- HT, of fundus
- FHT

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ANTEPARTAL ASSESSMENT

• Weight, blood pressure, urine sample
• Blood work
  – H&H, HIV, rubella screen and Rh factor
• Due date
  – EDC - estimated date of confinement
  – EDD - estimated due date
  – Screened for
    • PIH
    • Gestational diabetes
    • Anemia
    • Coombs
FETAL GROWTH ASSESSMENT

• Empty bladder first
• Measure fundal height
• Measurement gives indications of IUGR (intrauterine growth retardation)
• McDonald’s method
  – Measure from suprapubic to top of fundus
  – Fundal height in centimeters corresponds to weeks of gestation after 22-24 weeks and up to 34 weeks (20 weeks usually at the umbilicus)
  – Not always accurate
Figure 17-7  Measurement of the fundal height from symphysis that A, includes the upper curve of the fundus, and B, does not include the upper curve of the fundus.
HISTORY OF CURRENT PREGNANCY
HISTORY of PAST PREGNANCIES
MEDICAL HISTORY

- Past history from patient
- Medical history of family
- Done to determine
  - Diabetes
  - PIH
  - Genetic problems
**OB HISTORY TERMS**

- **PARA:** number of children born after 20 weeks, alive or dead; multiple births counted as 1 para.

- **GTPAL:**
  - G  gravida
  - T  full term infants
  - P  preterm infants
  - A  abortions
  - L  living children
  - M  multiple pregnancies

- **GTPALM:** addition of multiple births

- **FULL TERM:** born at 37 wks or after
**OB HISTORY TERMS**

- **Abortion:** medical term for any pregnancy terminated before age of viability
- **Miscarriage:** lay term meaning spontaneous abortion
- **Viability:** earliest age of fetal survivability
  - 20-24 weeks
  - Wt. > 400 grams
- **Gravida:** any pregnancy, regardless of duration, including present pregnancy
OB HISTORY TERMS

• **Preterm**: born before 37 weeks

• **Gestation**: time elapsed, measured in weeks since 1st day of last menstrual period

• **FHT** = fetal heart tones
  
  ( **FHR** = fetal heart rate )

  – Normal = 120 - 160 bpm
  – by Doppler heard at 10 - 12 weeks
  – by fetoscope heard at 18 - 20 weeks

• **Quickening**: The first movement of the fetus felt by the mother

  – 10-12 movements per hour
  – felt after 20 weeks
OB HISTORY TERMS

• ENGAGEMENT: the largest diameter of the presenting part reaches or passes through pelvic inlet

• LIGHTENING: fetus begins to settle into the pelvic inlet
  – The baby drops
  – Can breathe easier
  – Occurs 10 - 14 days before labor in primiparas & just before labor in multiparas
  – Increased leg cramps, pain, & pelvic pressure
  – Urinary frequency
  – Braxton-Hicks contractions

• BALLOTMENT: the fetus is freely moving or floating above the inlet
Figure 17-8, B  Doppler ultrasound stethoscope (12 weeks).
Figure 17-8, A  Detecting fetal heartbeat. Fetoscope (18-20 weeks).

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Figure 17-8, C  Pinard’s stethoscope.
Figure 21-2, B  Ultrasound transducer is placed below umbilicus, over the area where fetal heart rate is best heard, and tocotransducer is place on uterine fundus.

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LEOPOLD’S MANEUVER

- Done to check fetal lie
- A – longitudinal or transverse
- B – where are fetal parts
  - Where are the small parts
  - Where is the back
  - What is felt at the fundus
    - Head or buttock
- C – check whether one or more fetuses
LEOPOLD’S MANEUVER
PREPARATION

• Make patient comfortable
• Empty bladder
• Lie on back with pillows under shoulders, knees raised
• Check between contractions or during a rest period
• Make sure your hands are warm
LEOPOLD’S MANEUVER

PROCEDURE

I  •  Face mom and palpate upper abdomen with both hands to check for body part in fundus

II  •  Move to mid-abdomen and palpate with one hand and hold other hand steady
   - Reverse: feel for fetal back (firm and smooth)
   - Small protrusions on opposite side - extremities

III  •  With thumb and finger, grasp lower abdomen to determine if head in lower abdomen. Push back and forth to check engagement

IV  •  Face feet. With fingers of both hands, move gently to pubis and palpate for brow. If prominence felt on same side of back, then the head is not flexed.
Leopold's maneuvers.

First maneuver
Identify fetal part in fundus.

Second maneuver
Identify fetal back & small parts

Third maneuver
Determine engagement

Fourth maneuver
Determine attitude of fetal head or if a breech
ANTEPARTUM VISITS

FREQUENCY

• Every 4 weeks for 28 weeks
• Every 2 weeks to 36 weeks
• Every week until delivery
ANTEPARTUM TEACHING

• Deal with language barriers
  – Use interpreter

• Be alert to cultural differences and beliefs
  – If not harmful do not impose on their beliefs

• Deal with sibling problems

• Teach Mom:
  – Possible discomforts of pregnancy
  – Nutrition: eat from the 4 basic food groups
  – What to expect each trimester

• Teach Dad:
  – What to expect each trimester
ANTEPARTUM TEACHING

• Warning Signs:
  – Premature rupture of membranes
  – Bleeding
  – Fever 101 or greater
  – Increased blood pressure
  – Dizziness
  – Blurred vision or spots before eyes
  – Edema of face & hands
  – Muscle irritability
  – Absence of fetal movement

• Call MD for any of the above symptoms immediately

• No live virus vaccine during pregnancy
  – measles
  – mumps
  – rubella
LABOR and DELIVERY
LIGHTENING

- Fetus begins to settle into pelvic inlet (engagement)
- Uterus moves downward and does not press on diaphragm
- Can breathe easier
- Occurs 10 - 14 days before labor in primiparas
- Occurs just before labor in multiparas
- Following may occur:
  - Leg cramps
  - Increased pelvic pressure
BRAXTON HICKS CONTRACTIONS

- Usually become stronger in last week or days before labor
- Called FALSE LABOR
- Can be fairly regular
- First felt abdominally
- Often disappear with ambulation
- Do not increase in duration, frequency, or intensity
- Do not achieve cervical dilation
- Often result in trips to hospital
- Reassurance by nursing staff can ease embarrassment
TRUE vs. FALSE LABOR

• True Labor
  – Regular
  – Increases in frequency, duration and intensity
  – Progressive dilatation and effacement

• False Labor
  – Irregular
  – Does not increase in frequency, duration and intensity
CLUE TO CONTRACTIONS

CAN YOU FIGURE OUT THE

D - DURATION
I - INTENSITY
F - FREQUENCY
MONITORING CONTRACTIONS

• Done to observe duration, intensity (strength of contractions) and frequency

• External
  – TOCO applied to fundus

• Internal
  – IUPC – intrauterine pressure catheter
Figure 21-2, B  Ultrasound transducer is placed below umbilicus, over the area where fetal heart rate is best heard, and tocotransducer is placed on uterine fundus.
Fig. 20-2A External noninvasive fetal monitoring with tocotransducer and ultrasound transducer. (Courtesy Marjorie Pyle, RNC.)
Fig. 20-3 Diagrammatic representation of internal invasive fetal monitoring.
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Fig. 20-4A, B Display of fetal heart rate and uterine activity on monitor paper.


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CERVICAL CHANGES

• As term approaches a softening occurs
• Called RIPENING
• Able to stretch and dilate to allow fetal passage
BLOODY SHOW

- Results when mucous plug is expelled
- Small blood loss from exposed cervical capillaries
- Is blood mixed with mucus
- Labor usually begins in 24 - 48 hours
AMNIOTIC FLUID

- Normal color clear as water
- Yellow-staining may indicate a blood incompatibility between mother and fetus
  - Bilirubin-stained from breakdown of red blood cells
- Green-colored indicates meconium staining
  - Normal in breech presentation because of buttock compression
  - In vertex presentation may indicate fetal anoxia in utero
    - Fetus requires immediate interventions
    - Close observation after birth for potential meconium aspiration
RUPTURE OF MEMBRANES

- Often occurs before onset of labor
- After rupture labor usually occurs within 24 hours
- Amniotic fluid may be expelled in a sudden gush or scanty, slow seeping
- Fluid should be clear
- Main risks of ROM:
  - Infection
  - Prolapsed cord
- Induction usually done if labor does not occur spontaneously in 24 hours
• Instruct to proceed to hospital as soon as membranes rupture
• Nurses use universal precautions with amniotic fluid
AMNIOTOMY

• Artificial rupture of membranes (AROM)

• Reason to perform
  – To assess fetal status and fetal distress
GRAVIDA AND PARA

- Terms refer to PREGNANCIES AND BIRTHS not fetus

- Gravida = the number of times a woman has been pregnant including present pregnancy

- Para = the number of pregnancies that reached viability and were delivered
  - Alive or stillborn
  - After 20 weeks gestation

- Abortion = the termination of pregnancy when the fetus weighs < 500 grams or loss of pregnancy before 20 weeks
CLASSIFICATION OF PREGNANCY STATUS

• GTPAL or GTPALM = a more comprehensive system for classifying pregnancy status
• Gravida = The number of times pregnant
• T = The number of full-term infants born
  – 37 weeks or after
• P = The number of preterm infants born
  – before 37 weeks
• A = The number of spontaneous or induced abortions
• L = The number of living children
• M = Multiple pregnancies
CERVICAL CHANGES

• EFFACEMENT
  – The shortening and thinning of the cervical canal. The taking up of the internal os and cervical canal into uterine side walls. The cervix changes from a long, thick structure to a paper-thin structure.
  – Progressive process and measured in percents
    • 25%, 50%, 75%, 100%
  – In primiparas is accomplished before dilation begins
  – In multiparas, dilation may proceed before effacement is complete
CERVICAL CHANGES

• DILATATION
  – The enlargement of the cervical canal from an opening of 0cm to 10cm
  – Accompanied by increased show
  – 1 fingerbreadth = 1.5 - 2 cm
Palpate the cervix, noting the centimeters of dilation.
**STATION**

- Refers to the relationship of the presenting part of the fetus to the level of the ischial spines.
- At the level of the ischial spines it is 0 station = ENGAGEMENT.
- Above the spines the distance is described as minus:
  - Range from -1 cm to -4 cm.
- Below the spines the distance is described as plus:
  - Range from +1 cm to +4 cm.
- At +3 or +4 station, presenting part is at the perineum = CROWNING.
- Above -3 fetus is not into true pelvis = FLOATATING.
- At +3 on way to delivery room.
FETAL STATION
(RELATIONSHIP OF FETAL HEAD TO MOTHER'S PELVIS)

I'M AT ZERO... FROM HERE IT'S ALL POSITIVE... I'M ON MY WAY OUT!!!
+4 STATION AND DELIVERY

NURSE, WHY DIDN'T YOU TELL ME SHE WAS SO CLOSE TO DELIVERY?!

I TOLD YOU 15 MINUTES AGO SHE WAS AT +3!!!

(PLUS FOUR IS ON THE FLOOR!)
CROWNING

• 10 CM. OF DILATION

• 100% EFFACEMENT
POSITION OF PRESENTING PART

- Tells more specifically how fetus is lying in pelvis
- Is the relationship of the presenting part of the fetus to front, back, or side of maternal pelvis
- Fetal landmarks:
  - Occiput
  - Sacrum
  - Mentum
  - Scapula
- 6 possible positions possible in cephalic presentation:
  - LOA, LOT, LOP, ROA, ROT, ROP
- Any deviation from ROA or LOA tends to cause a longer labor
Figure 19-2 Examples of fetal vertex (occiput) presentations in relation to front, back or side of maternal pelvis.

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STAGES OF LABOR

(Stage of cervical dilation.) Begins with onset of regular contractions and ends with complete dilation. Latent → Active → Transitional

-First Stage-

(Stage of expulsion.) Begins with complete cervical dilation and ends with delivery of fetus.

-Second Stage-

(Placental stage.) Begins immediately after fetus is born and ends when the placenta is delivered.

-Third Stage-

(Maternal homeostatic stabilization stage.) Begins after the delivery of the placenta and continues for one to four hours after delivery.

-Fourth Stage-
FIRST STAGE

LATENT

- 0-3 cm. Of dilation
- 10-20 minutes frequency
- 15-20 second duration
- Regular
- Patient smiling, excited, talkative
FIRST STAGE

ACTIVE

• 4-8 cm. of dilation
• 2-3 minutes frequency
• 60 second duration
• Regular
FIRST STAGE

TRANSITION

- 8-10 cm. of dilation
- 1 ½ - 2 minutes frequency
- 60-90 second duration
- Regular
- Patient has anxiety, fear, is tired and inner-directed
- May go between wanting supported to being left alone
- Nursing interventions
  - Reassure
  - Refocus
  - Breathing
  - Comfort with backrub, cool towel, ice chips
SECOND STAGE

- 10 cm. to birth
- Crowning occurs
- Have precipitous tray ready
- Nursing interventions
  - Be ready for delivery
  - Reassure
  - Breathing
THIRD STAGE

- Placental separation 5 minutes after birth
- Sudden gush of blood
- Cord protrudes more
- Uterus becomes globular
- Nursing interventions
  - Massage uterus to firm up
  - Care of newborn
NEWBORN PRIORITY

• #1 Respiration
  – Suction with bulb syringe
  – Use oxygen blow by or mask if needed

• #2 Keep warm
  – Dry infant and keep under radiant warmer uncovered; blankets will not transmit heat
FOURTH STAGE

• 1-4 hours recovery period
  – Check blood pressure for hypotension
  – Urinary output (bladder hypotonic due to trauma or anesthesia)
  – Bleeding (blood loss 250-500 cc’s)
  – Fundus should be midline
Analgesia / Anesthesia
EARLY FIRST-STAGE LABOR: Pain intensity moderate

LATE FIRST-STAGE LABOR: Pain intensity severe

EARLY SECOND-STAGE LABOR

DELIVERY

Pain intensity:  
- Mild
- Moderate
- Severe
Fig. 19-10B Position for spinal and epidural blocks. Upright position. (Courtesy Michael S. Clement, MD.) © 2004, Mosby, Inc. All rights reserved.
Fig. 19-10C Position for spinal and epidural blocks. Catheter is taped to woman’s back with port segment located near her shoulder. (Courtesy Michael S. Clement, MD.)
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EPIDURAL ANESTHESIA

COMPLICATIONS

• Hypotension
• Itching
• Respiratory paralysis
• Loss of bladder tone
EPIDURAL ANESTHESIA

NURSING INTERVENTIONS

• Increase IV fluids
• Administer oxygen – face mask
• Left lateral position to remove pressure from inferior vena cava
• Keep supine initially to diffuse anesthesia bilaterally
• Catheterize
Fig. 19-9A Membranes and spaces of spinal cord and levels of sacral, lumbar, and thoracic nerves.

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Spinal Anesthesia

- Spinal cord
- Epidural space
- Dura mater
- Intraspinal ligament
- Ligamentum flavum
- Subarachnoid space

BLOOD PATCH

SPINAL BLOCK

- Level of anesthesia for cesarean birth
- Level of anesthesia for vaginal birth
INFILTRATE ANESTHESIA

• Paracervical – for uterus and cervix, late first stage

• Pudendal – vaginal and cervical area, late second stage

• Perineal – local perineal numbing for repair of episiotomy, late second stage
SAFETY ISSUES

• Know the board
  – Station
  – Effacement
  – Dilatation
  – Age, gravida, para, weeks of pregnancy
  – Epidural anesthesia
  – Magnesium sulfate
  – Pitocin drip
  – Active labor if 4 cm. dilated

• Continuous assessment
  – Fetal heart tones
  – Vital signs
  – contractions
SAFETY ISSUES

• Vaginal exam (sterile) done by
  – Nurse
  – Physician
  – Midwife

• Rupture of membranes
  – Spontaneous
  – Artificial (amniotomy)
SAFETY ISSUES

- Check color of amniotic fluid; do not want meconium stained. Inform R.N. immediately. Wear gloves. Keep patient dry. No ambulation after ROM
- All medications by IV. Do not touch IV’s
- Wear gloves at all times
- Lift sheet and observe for progress, show, bleeding and crowning
- Do not feed or get patient out of bed without orders
SAFETY ISSUES

- No charting on nurse’s notes or strips. Only done by trained personnel
- Review films prior to going on unit
- Can help to apply external monitors
- Can do catheterization with supervision
- Observe strips for decelerations. Know how to read strips. Discuss strips with the staff
HE WHO LEARNS

BUT DOES NOT THINK,

IS LOST!
THE END